at1110paper_practice_test (v42)

1. Expand the following expression into standard form.

$$(3x + 2)(9x + 4)$$

2. Expand the following expression into standard form.

$$(7x - 3)^2$$

3. Factor the expression.

$$49x^2 - 81$$

4. Solve the equation.

$$6x^2 + 22x + 16 \;=\; 3x^2 + 5x - 4$$

5. Factor the expression.
$$x^2 - 6x - 27$$

6. Solve the equation.
$$(5x + 9)(7x + 3) \;=\; 0$$

7. Solve the equation with factoring by grouping.
$$12x^2 - 18x + 10x - 15 \;=\; 0$$

8. Expand the following expression into standard form.
$$(7x - 3)(7x + 3)$$